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DVIG MORSKE GLADINE IN RABA OBALNEGA PASU

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Povzetek

Zaradi podnebnih sprememb se bo pogostnost in intenzivnost ekstremnih vremenskih dogodkov povečala (poplave, neurja, suše), ogrožena pa bodo tudi življenja ljudi ter njihova lastnina. Pomanjkanje hrane in vode, povečana smrtnost, širjenje bolezni, selitve prebivalstva in velike materialne škode so posledice, ki jih bo planet utrpel zaradi ekoloških sprememb. Ena od teh je tudi dvig morske gladine. Preučevanje dviga morske gladine je razmeroma mlada znanstvena veda, na problem so pa znanstveniki postali pozorni šele v petdesetih letih prejšnjega stoletja. Ravno v zadnjih desetletjih smo namreč pričali izraziti spremenljivosti podnebja, ki ji z vse večjimi izpusti toplogrednih plinov in spreminjanjem površja planeta v veliki meri botruje človek. Višanje globalne temperature vpliva na taljenje kopenskega ledu in razpenjanje morja ter posledično viša nivo morske gladine, kar predstavlja veliko nevarnost za obalni pas in prebivalce obalnih krajev. Ker je proces praktično nemogoče ustaviti, se bo človek moral spremembam prilagoditi. Za izvedbo takih ukrepov bodo potrebne temeljite evalvacije ogroženosti iz katerih bo možno določiti stopnjo tveganja za posamezno območje, ki je lahko precenjeno ali podcenjeno; odvisno od razpoložljivih podatkov o posameznem območju. Med najbolj ključnimi za določanje tveganja bodo analize poplavljanja morja, katerih podatki morajo biti karseda podrobni. To pomeni predvsem natančno upodobitev terena s pomočjo geografskih informacijskih sistemov (GIS), kjer se nam ponujajo možnosti uporabe najsodobnejše tehnologije LIDAR.

Ključne besede: dvig morske gladine, obalni pas, prostorski podatki, GIS, ocena tveganja

Abstract

Global climate change will increase frequency and intensity of climate extremes (storms, floods, cyclones), but the main threat that it represents will be the one on human lives and their property. It will effect food production, freshwater availability, amplify health effects, such as death and disease outbreaks, cause population displacement and physical damage. One of consequences that modern world will have to face is also mean sea level rise. Research work, that has been done on sea level rise, is as wide as the data collected on this matter. Thus scientists became interested on global warming and potential sea leve rise, but only after some great storm disasters that happened in last decades. Increasing of global temperature affects ice sheet melting and thermal expansion of the sea, which are the two main causes that make sea level rise and put in danger many people that have lived by the ocean for thousands of years. Since sea level rise is practically irreversible, people will be forced to make some adaptations in order to respond to this natural hazard. Hence there will be a need for proper evaluation of hazards so that scientists can find an appropriate methodology for carrying out vulnerability assessment in a diverse coastal area. The most important data, in confronting with solutions for this problem, will be the one colected for flood simulations. Those demand a great accuracy which means precise topography representation of coastal areas. That can be successfully achieved with geographic information system (GIS), among which LIDAR is one of most up-to-date technologies.

Key words: sea level rise, coastal zone, spatial data, GIS, hazard evaluation